



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

Cobalt-nickel Arsenides and Silver Deposits of Temiskaming. (3d ed.) BY WILLET G. MILLER. Report of the Bureau of Mines, 1907. Vol. XVI, Part II, 212 pp., 4 maps, and 100 illustrations. Toronto, 1908.

This report brings the mining situation of the region clearly before the public. Conditions have adjusted themselves to a working basis and stock-jobbing has almost ceased. The oldest rocks of the area are the Keewatin into which is intruded the Laurentian granite. Unconformably on these is the Lower Huronian conglomerate and slates. The Middle Huronian lies unconformably on the Lower. Finally there was a large intrusion and extrusion of basic rocks in Keeweenawan time. Associated with the diabase and on its outer edge are the ore-bearing veins. Occasionally they are found running out into the Keewatin green-schists. The width given for the veins is 14 inches or less. At Silver Islet they have been worked to a depth of 1,200 ft.

The ores present are: native silver, smaltite, cobaltite, niccolite, chloanthite, millerite, argentite, pyrrargyrite, proustite, dyscrasite, native bismuth, tetrahedrite, chalcopyrite, bornite, mispickel, pyrite, galena, asbolite, and zinc blende. The following occur in the oxidized zone: native silver, erythrite, and annabergite. Native silver and smaltite are the important ones. The origin of the ores is still unknown. The total value of ore produced up to 1908 was \$10,000,000, of which 50 per cent. was profit.

The report contains descriptions of the most important mines also an appendix giving a list of companies incorporated during 1904-8, and an early history of the cobalt industry in Saxony.

C. J. H.

Some Relations of Paleogeography to Ore Deposition in the Mississippi Valley. BY H. FOSTER BAIN. Mexico, 1907.

The ore deposits are chiefly lead and zinc which are in no way related to vulcanism. The Wisconsin district is considered in detail. The present ore bodies are believed to be the result of reduction of sulphates to sulphides by reactions between ore-bearing solutions and organic matter in the country rock. Sulphurization of carbonates has also taken place. Original precipitation of the material from the sea water was likely due to the same reactions. Original localization may have been due to: (1) local abundance of the metals in solution; (2) local abundance of the organic reducing matter; (3) locally peculiar organic matter leading to particular efficiency in producing deposition.

The local abundance of lead and zinc in solution may have accumulated

along the shore from streams draining areas of the crystalline rocks to the north in which the metals were unequally distributed. The evidence supporting this is, that certain ore basins resemble in shape the embayments at the mouths of streams, or drowned river valleys. Further, there are considerable quantities of mechanical sediments within them, but not elsewhere. The source of the reducing agents is the bituminous shale, "oil rock." This rock contains only partially decomposed plants even now giving off complex hydrocarbons of great reducing power. This rock occurs in irregular patches which were probably determined by the unicellular plants accumulating in quiet protected places. As the rock decomposed the decrease in volume gave rise to small depressions in larger ones. The settling produced pitching crevices and features, which allowed circulation of volatile matter and solutions, the result being concentration of lead and zinc ores.

C. J. H.

Tertiary Plants of British Columbia. Collected by L. M. Lambe in 1906. Discussion of Previously Recorded Tertiary Floras. BY D. P. PENHALLOW. Ottawa, 1908.

The Tertiary deposits of western Canada are mainly in British Columbia, Alberta, and Saskatchewan, with important outliers to the northward and westward. Two hundred and seventy-one species and genera of plants were collected. They are of Eocene, Oligocene, and Miocene age. They fall into two groups, one distinctly Eocene, the other Miocene or Oligocene. Their stratigraphical distribution is given in a series of tables. Tertiary formations of B. C., at present, cannot be regarded as more recent than the Lower Miocene, the greater portion being Oligocene. Further the beds are superimposed in part upon the older Tertiary of Lower Eocene, Upper Laramie, Fort Union, or Lignite Tertiary age which immediately overlies the Cretaceous. These beds extended east as far as Turtle Mountain in Manitoba, but were separated from the western by the Rocky Mountain uplift in Miocene time.

C. J. H.

West Virginia Geological Survey. Vol. II (A), 1908. Supplementary Coal Report. BY I. C. WHITE, State Geologist. 720 pp., map.

The volume is largely a compilation of descriptions of many sections taken from the various coal-fields of the state. Certain errors in correlation in Vol. II are corrected. The stratigraphical position of the various coal-beds, formations, and series is chiefly determined by borings, from shafts, and by structural relations. The production of coal in the state has steadily increased since 1873, the product in 1907 being 48,091,583 short tons.

C. J. H.